

03060107-010

(Stevens Creek)

General Description

Watershed 03060107-010 is located in Greenwood and McCormick Counties and consists primarily of **Stevens Creek** and its tributaries from its origin to Turkey Creek. The watershed occupies 159,118 acres of the Piedmont region of South Carolina. The predominant soil types consist of an association of the Cecil-Tatum-Herndon-Georgeville-Helena series. The erodibility of the soil (K) averages 0.33, and the slope of the terrain averages 7%, with a range of 2-25%. Land use/land cover in the watershed includes: 79.9% forested land, 10.5% agricultural land, 7.4% barren land, 1.8% urban land, 0.2% forested wetland, and 0.2% water.

Hard Labor Creek originates within the City of Greenwood and accepts drainage from Panola Branch (Oregon Pond), Muskrat Pond Branch, Armstrong Branch, Big Cowhead Creek (Little Cowhead Creek), Beaverdam Branch, Coleman Branch, Chiles Branch (Stillhouse Branch), Cuning Ford Creek (Church Branch), Brissey Branch, Calabash Branch (Goatneck Branch), Big Branch, Hibbler Branch, Buncombe Branch, Bracknell Branch, and Blue Branch. Cuffytown Creek originates near the City of Greenwood and accepts drainage from Horsepen Creek, Beaverdam Creek, Reedy Creek, Little Horsepen Creek, Little Creek, Mill Branch, Sand Branch, Cow Branch, Sandhill Branch, Lick Creek, Hill Branch, Doctors Branch, and Big Tree Branch. Hard Labor Creek and Cuffytown Creek merge to form Stevens Creek, which accepts drainage from Deal Branch, Rocky Creek (Persimmon Branch), and Byrd Creek. There are a total of 323.8 stream miles and 42.9 acres of lake waters in this watershed, all classified FW.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
SV-151	P/BIO	FW	HARD LABOR CREEK AT S-24-164 BRIDGE
SV-731	BIO	FW	HARD LABOR CREEK AT S-33-23
SV-351	W/BIO	FW	CUFFYTOWN CREEK AT S-33-138
SV-730	BIO	FW	ROCKY CREEK AT S-33-87
SV-330	W	FW	STEVENS CREEK AT S-33-21

Hard Labor Creek - There are two monitoring sites along Hard Labor Creek. Aquatic life uses are partially supported at the upstream site (**SV-151**) based on macroinvertebrate community data. There is a significant decreasing trend in pH. Significant decreasing trends in five-day biochemical oxygen demand, turbidity, and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are not supported at this site due to fecal coliform bacteria excursions; however, a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter. At the downstream site (**SV-731**), aquatic life uses are fully supported based on macroinvertebrate community data.

Cuffytown Creek (SV-351) – Aquatic life uses are fully supported based on macroinvertebrate community data; however, there were dissolved oxygen excursions. Recreational uses are partially

supported due to fecal coliform bacteria excursions.

Rocky Creek (SV-730) – Aquatic life uses are partially supported based on macroinvertebrate community data.

Stevens Creek (SV-330) – Aquatic life uses are fully supported; however, there is a significant decreasing trend in dissolved oxygen concentration. Significant decreasing trends in five-day biochemical oxygen demand and total phosphorus concentration suggest improving conditions for these parameters. Recreational uses are fully supported.

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-107	GB	PIEDMONT BEDROCK	N.W. EDGEVILLE COUNTY

All water samples collected from ambient monitoring well **AMB-107** met standards for Class GB groundwater.

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
HARD LABOR CREEK CITY OF GREENWOOD/W. ALEXANDER WWTP PIPE #: 001 FLOW: 2.2	SC0022870 MAJOR DOMESTIC
HARD LABOR CREEK MEDICAL TEXTILES INC. PIPE #: 001 FLOW: M/R	SCG250065 MINOR INDUSTRIAL
PANOLA BRANCH GREENWOOD MILLS/MATTHEWS PLT PIPE #: 001 FLOW: M/R	SCG250127 MINOR INDUSTRIAL
MUSKRAT POND BRANCH GREENWOOD MILLS/DURST PLT PIPE #: 001, 002 FLOW: M/R	SCG250124 MINOR INDUSTRIAL
MUSKRAT POND BRANCH GREENWOOD MILLS/CHALMERS PLT PIPE #: 001, 002, 003 FLOW: M/R	SCG250125 MINOR INDUSTRIAL
OREGON POND GREENWOOD MILLS/MATTHEWS PLT PIPE #: 002, 003 FLOW: M/R	SCG250127 MINOR INDUSTRIAL
PERSIMMON BRANCH MCCORMICK CPW/WTP PIPE #: 001 FLOW: M/R	SCG645007 MINOR INDUSTRIAL

PERSIMMON BRANCH TRIBUTARY
MILLIKEN & CO./MCCORMICK PLT
PIPE #: 001 FLOW: M/R

SC0000396
MAJOR INDUSTRIAL

ROCKY CREEK
MCCORMICK ROCKY CREEK WWTF
PIPE #: 001 FLOW: 0.85

SC0030783
MINOR DOMESTIC

Nonpoint Source Management Program

Mining Activities

MINING COMPANY
MINE NAME

PERMIT #
MINERAL

SAVANNAH RIVER QUARRIES, INC.
QUARRY #1

1271-65
GRANITE

GS ROOFING PRODUCTS CO., INC.
PLUM BRANCH QUARRY

0998-65
METAANDESITE

Water Quantity

WATER USER
STREAM

TOTAL PUMP. CAPACITY (MGD)
RATED PUMP. CAPACITY (MGD)

MCCORMICK CPW
ROCKY CREEK

0.5
0.5

Growth Potential

There is a low to moderate potential for growth in this watershed, which contains portions of the Towns of Promised Land, Bradley, Troy, McCormick, Plum Branch, and Parksville, and a portion of the City of Greenwood. The Town of McCormick has experienced a population growth with the establishment of a State Prison near the town. Growth has occurred around the Savannah Lakes Village Development, a retirement village, on Lake Thurmond, and may encourage more in the future. The Greenwood Industrial Park, just south of the City of Greenwood, is considered a source of potential industrial growth. The midsection of the watershed resides within the Sumter National Forest and would tend to limit growth in that area.